

Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan Commissioner

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

NEW SOURCE CONSTRUCTION PERMIT and MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

LDM Technologies, Inc. 300 South Progress Drive East Kendallville, Indiana 46755

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1 if new source, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 113-16454-00059

Issued by:

Paul Dubenetzky, Branch Chief

Office of Air Quality

Issuance Date: March 14, 2003

Expiration Date: March 14, 2008

LDM Technologies, Inc. Kendallville, Indiana Permit Reviewer: EAL/MES

TABLE OF CONTENTS

Α	SOUR A.1 A.2	CE SUMMARY	4
В	B.1 B.2 B.3 B.4 B.5 B.6 B.7 B.8 B.9 B.10 B.11 B.12	Permit No Defense [IC 13] Definitions Effective Date of the Permit [IC 13-15-5-3] Revocation of Permits [326 IAC 2-1.1-9(5)] [326 IAC 2-2-8] Permit Term and Renewal [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5] Modification to Permit [326 IAC 2] Minor Source Operating Permit [326 IAC 2-6.1] Annual Notification [326 IAC 2-6.1-5(a)(5) Preventive Maintenance Plan [326 IAC 1-6-3] Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6] Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]	5
С	B.13	Annual Fee Payment [326 IAC 2-1.1-7] CE OPERATION CONDITIONS	9
•	OOOK	of thation conditions	9
	C.1 C.2 C.3 C.4 C.5	Particulate Emission Limitations For Processes with Process Weight Rates Less Than On Hundred (100) pounds per hour [40 CFR 52, Subpart P] [326 IAC 6-3-2] Permit Revocation [326 IAC 2-1.1-9] Opacity [326 IAC 5-1] Fugitive Dust Emissions [326 IAC 6-4] [326 IAC 6-1-11.1] Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	е
	Testin C.6	g Requirements Performance Testing [326 IAC 3-6]	
	Compl C.7	iance Requirements [326 IAC 2-1.1-11] Compliance Requirements [326 IAC 2-1.1-11]	
	Comple C.8 C.9 C.10	iance Monitoring Requirements Compliance Monitoring [326 IAC 2-1.1-11] Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63] Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3 [326 IAC 2-7-6(1)] Actions Related to Noncompliance Demonstrated by a Stack Test)]
	Record C.12 C.13 C.14	d Keeping and Reporting Requirements Malfunctions Report [326 IAC 1-6-2] General Record Keeping Requirements [326 IAC 2-6.1-5] General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]	
D.1	FACIL	ITY OPERATION CONDITIONS: Three (3) spray booths (MB-1, AB-1 and AB-2) 1	4
	Emiss D.1.1	ion Limitations and Standards Particulate [326 IAC 6-3-2(d)]	

LDM Technologies, Inc. Kendallville, Indiana Permit Reviewer: EAL/MES Page 3 of 18 MSOP 113-16454-00059

Malfunction Report		15
Annual Notification		17
Affidavit of Construc	iction	18

Page 4 of 18 MSOP 113-16454-00059

Kendallville, Indiana Permit Reviewer: EAL/MES

LDM Technologies, Inc.

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary plastic automotive parts manufacturing source.

Authorized Individual: Plant Manager

Source Address: 300 South Progress Drive East, Kendallville, Indiana 46755 Mailing Address: 300 South Progress Drive East, Kendallville, Indiana 46755

General Source Phone: (260) 347-0500

SIC Code: 3089 County Location: Noble

Source Location Status: Attainment for all criteria pollutants
Source Status: Minor Source Operating Permit

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) One (1) manual paint spray booth, identified as MB-1, installed in 1985, equipped with a dry particulate filter, exhausting to Stack 1, capacity: 200 automotive air registers per hour.
- (b) One (1) automatic paint spray booth, identified as AB-1, installed in 1985, equipped with a dry particulate filter, exhausting to Stack 2, capacity: 1,000 automotive air registers per hour.
- (c) Forty (40) injection molding machines.
- (d) One (1) automatic paint spray booth, identified as AB-2, installed in 2003, equipped with a dry particulate filter, exhausting to Stacks AB-2-1 and AB-2-2, capacity: 360 automotive air registers per hour.

LDM Technologies, Inc.

Page 5 of 18

Kendallville, Indiana

MSOP 113-16454-00059

Permit Reviewer: EAL/MES

SECTION B

GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Permit Term and Renewal [326 IAC 2-6.1-7(a)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.6 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.7 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2-6.1-6 and an Operation Permit Validation Letter is issued.

LDM Technologies, Inc.

Page 6 of 18

Kendallville, Indiana

MSOP 113-16454-00059

Permit Reviewer: EAL/MES

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Page 7 of 18 MSOP 113-16454-00059

LDM Technologies, Inc. Kendallville, Indiana Permit Reviewer: EAL/MES

> Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMP whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.10 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.11 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, when applicable) U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

LDM Technologies, Inc.

Page 8 of 18

Kendallville, Indiana

MSOP 113-16454-00059

Permit Reviewer: EAL/MES

(c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.12 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

B.13 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

LDM Technologies, Inc. Kendallville, Indiana Permit Reviewer: EAL/MES

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52, Subpart P] [326 IAC 6-3-2]
 - (a) Pursuant to 40 CFR 52, Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
 - (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

Page 10 of 18 MSOP 113-16454-00059

LDM Technologies, Inc. Kendallville, Indiana Permit Reviewer: EAL/MES

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
 The Permittee shall comply with the applicable emission control procedures in 326 IAC 1410-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
 The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior
 to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly
 inspect the affected portion of the facility for the presence of asbestos. The requirement that
 the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally
 enforceable.

Page 11 of 18 MSOP 113-16454-00059

LDM Technologies, Inc. Kendallville, Indiana Permit Reviewer: EAL/MES

Testing Requirements

C.6 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.8 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.10 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of total static pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

LDM Technologies, Inc.

Page 12 of 18

Kendallville, Indiana

MSOP 113-16454-00059

(b) Whenever a condition in this permit requires the measurement of a temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

- (c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.
- (d) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

C.11 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected emissions unit while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.12 Malfunctions Report [326 IAC 1-6-2]

Permit Reviewer: EAL/MES

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

Page 13 of 18 MSOP 113-16454-00059

LDM Technologies, Inc. Kendallville, Indiana Permit Reviewer: EAL/MES

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.13 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.14 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

LDM Technologies, Inc. Kendallville, Indiana Permit Reviewer: EAL/MES

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) One (1) manual paint spray booth, identified as MB-1, installed in 1985, equipped with a dry particulate filter, exhausting to Stack 1, capacity: 200 automotive air registers per hour.
- (b) One (1) automatic paint spray booth, identified as AB-1, installed in 1985, equipped with a dry particulate filter, exhausting to Stack 2, capacity: 1,000 automotive air registers per hour.
- (c) Forty (40) injection molding machines.
- (d) One (1) automatic paint spray booth, identified as AB-2, installed in 2003, equipped with a dry particulate filter, exhausting to Stacks AB-2-1 and AB-2-2, capacity: 360 automotive air registers per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Particulate [326 IAC 6-3-2(d)]

- (a) Pursuant to 326 IAC 6-3-2(d), particulate from the one (1) manual paint spray booth (MB-1), the one (1) automatic paint spray booth (AB-1) and the proposed automatic paint spray booth (AB-2) shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications. This requirement to operate the control is not federally enforceable.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

LDM Technologies, Inc. Kendallville, Indiana Permit Reviewer: EAL/MES

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

and to qualify for the exemption under 326 IAC 1-6-4.	
THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER?, 25 TONS/YEAR SULFUR DIOXIDE?, 25 TONS/YEAR NITROGEN OXIDES?, 25 TONS/YEAR VOC?, 25 TONS/YEAR HYDROGEN SULFIDE?, 25 TONS/YEAR TOTAL REDUCED SULFUR?, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS?, 25 TONS/YEAR FLUORIDES?, 100 TONS/YEAR CARBON MONOXIDE?, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT?, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT?, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AND ELEMENTAL LEAD?, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2)? EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABILIMITATION	IR AR NY AS M
THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC OR, PERMIT CONDITION # AND/OR PERMIT LIMIT OF	
THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y	
THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT? Y	
COMPANY: PHONE NO. : LOCATION: (CITY AND COUNTY) PERMIT NO AFS PLANT ID: AFS POINT ID: INSP: CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:	
DATE/TIME MALFUNCTION STARTED:// 20 AM / ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:	
DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE// 20 AM / Pf	
TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:	
ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION:	
MEASURES TAKEN TO MINIMIZE EMISSIONS:	
REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS: CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: INTERIM CONTROL MEASURES: (IF APPLICABLE)	
MALFUNCTION REPORTED BY: TITLE: TITLE:	
MALFUNCTION RECORDED BY: DATE: TIME:	

*SEE PAGE 2

LDM Technologies, Inc.

Page 16 of 18

Kendallville, Indiana

MSOP 113-16454-00059

Permit Reviewer: EAL/MES

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

- Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.
- * <u>Essential services</u> are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:				

Page 17 of 18 MSOP 113-16454-00059

LDM Technologies, Inc. Kendallville, Indiana Permit Reviewer: EAL/MES

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	LDM Technologie	es, Inc.
Address:	300 South Progre	ss Drive East
City:	Kendallville	
Phone #:	(260) 347-0500	
MSOP #:	113-16454-00059	
hereby certify that LDM	Л Technologies, Inc. is	9 still in operation.9 no longer in operation.
hereby certify that LDI		ce with the requirements of MSOP 113-16454-00059 . liance with the requirements of MSOP 113-16454-00059 .
Authorized Individua	ıl (typed):	
Title:		
Signature:		
Date:		
		which the source is not in compliance, provide a narrative e compliance and the date compliance was, or will be
Noncompliance:		

LDM Technologies, Inc. Kendallville, Indiana Permit Reviewer: EAL/MES Page 18 of 18 MSOP 113-16454-00059

Mail to: Permit Administration & Development Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

LDM Technologies, Inc. 300 South Progress Drive East Kendallville, Indiana 46755

	Affid	avit of Construction	
I,		, being duly sworn upo	n my oath, depose and say:
(Name	e of the Authorized Representative)		
1.	I live in of sound mind and over twenty-one		County, Indiana and being
	of sound mind and over twenty-one	(21) years of age, I am	competent to give this affidavit.
2.	I hold the position of	fo	r (Company Name)
		(Title)	(Company Name)
3.	By virtue of my position with		, I have personal knowledge of the
	representations contained in this an	idavit and am authorized	d to make these representations on behalf of
	(Company Name)		
4.	I hereby certify that LDM Technolog	nies Inc. 300 South Pro	ogress Drive East, Kendallville, Indiana 46755,
т.			uring source on in conformity with
			and Minor Source Operating Permit application
			as permitted pursuant to MSOP No. 113-16454,
	Plant ID No. 113-00059 issued on		
	_		
Further Affiant s	aid not.		
		Signature	
		Date	
STATE OF INDI	IANA)	24.0	
)SS		
	,		
COUNTY OF _)		
Subsc	cribed and sworn to me, a notary public in a	nd for	County and State of Indiana
on this	day of	, 20	
My Commission	expires:		
wy commission		·	
		Signature	
		Name (typed or printe	d)

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for New Source Construction and a Minor Source Operating Permit

Source Background and Description

Source Name: LDM Technologies, Inc.

Source Location: 300 South Progress Drive East, Kendallville, Indiana 46755

County: Noble SIC Code: 3089

Operation Permit No.: MSOP 113-16454-00059
Permit Reviewer: Edward A. Longenberger

The Office of Air Quality (OAQ) has reviewed an application from LDM Technologies, Inc. relating to the construction and operation of a plastic automotive parts manufacturing source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) manual paint spray booth, identified as MB-1, installed in 1985, equipped with a dry particulate filter, exhausting to Stack 1, capacity: 200 automotive air registers per hour.
- (b) One (1) automatic paint spray booth, identified as AB-1, installed in 1985, equipped with a dry particulate filter, exhausting to Stack 2, capacity: 1,000 automotive air registers per hour.
- (c) Forty (40) injection molding machines.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

(d) One (1) automatic paint spray booth, identified as AB-2, installed in 2003, equipped with a dry particulate filter, exhausting to Stacks AB-2-1 and AB-2-2, capacity: 360 automotive air registers per hour.

Existing Approvals

The source has been operating under the following previous approvals including:

- (a) Registration issued on July 18, 1985; and
- (b) Transfer of Ownership 113-8799-00059, issued on August 18, 1997.

All terms and conditions from previous approvals issued pursuant to the permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous approvals are superseded by this permit.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
Stack 1	Spray Booth (MB-1)	35	1.667	3,100	ambient
Stack 2	Spray Booth (AB-1)	35	2.0	4,400	ambient
AB-2-1	Spray Booth (AB-2)	38	1.667	2,100	ambient
AB-2-2	Electric Oven	38	0.833	1,000	170

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 12, 2002, with additional information received on December 16, 2002.

Emission Calculations

See pages 1 through 2 of 2 of Appendix A of this document for detailed emissions calculations.

Negligible VOC and HAPs emissions were calculated for the injection molding machines.

Potential To Emit From Entire Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	6.20
PM ₁₀	6.20
SO ₂	0.00
VOC	38.6
СО	0.00
NO_{χ}	0.00

HAPs	Potential To Emit (tons/year)
Xylene	0.317
Toluene	4.23
MEK	6.32
HDI	0.007
Glycol Ether	4.23
Triethylamine	0.357
Ethylene Glycol	0.055
TOTAL	15.5

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

Actual Emissions

No previous emission data has been received from the source.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

		Limited Potential to Emit (tons/year)					
Process/facility	PM	PM ₁₀	SO ₂	VOC	СО	NO _x	HAPs
Spray Booth (MB-1)	1.39	1.39	-	16.9	-	-	5.52
Spray Booth (AB-1)	3.68	3.68	-	6.07	-	-	4.64

		Limited Potential to Emit (tons/year)					
Process/facility	PM	PM ₁₀	SO ₂	VOC	СО	NO _x	HAPs
Spray Booth (AB-2)	1.13	1.13	-	15.6	-	-	5.35
Injection Molding Machines	-	-	-	neg.	-	-	neg.
Total Emissions	6.20	6.20	-	38.6	-	-	15.5

County Attainment Status

The source is located in Noble County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
СО	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Noble County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Noble County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2,
 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance
 Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and
 volatile organic compound (VOC) emissions are not counted toward determination of PSD
 and Emission Offset applicability.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	5.07
PM ₁₀	5.07
SO ₂	0.00
VOC	23.0
CO	0.00
NO_X	0.00

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the operating permit application submitted by the company.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM ₁₀ (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	1.13	1.13	-	15.6	-	-
PSD Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit MSOP 113-16454-00059, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than one hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) any combination of HAPs is less than twenty-five (25) tons per year.

This status is based on all the air approvals issued to the source and calculations made by this permit reviewer.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

326 IAC 2-4.1-1 (New Source Toxics Control)

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments. Therefore, the requirements of 326 IAC 2-4.1-1 are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is located in Noble County and the potential to emit of CO, VOC, NO_X , PM_{10} and SO_2 are each less than one hundred (100) tons per year, therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Particulate from the one (1) manual paint spray booth (MB-1), the one (1) automatic paint spray booth (AB-1) and the proposed automatic paint spray booth (AB-2) shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

326 IAC 8-1-6 (New facilities; general reduction requirements)

The spray booths at this source are used to coat plastic automotive air registers, which is a process not specifically regulated under any provision of 326 IAC 8. The one (1) manual paint spray booth (MB-1), the one (1) automatic paint spray booth (AB-1) and the proposed automatic paint spray booth (AB-2) are not subject to the requirements of 326 IAC 8-1-6, because the potential VOC emissions from each booth are less than twenty-five (25) tons per year.

Conclusion

The construction and operation of this plastic automotive parts manufacturing source shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit **113-16454-00059**.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for New Source Construction and a Minor Source Operating Permit

Source Background and Description

Source Name: LDM Technologies, Inc.

Source Location: 300 South Progress Drive East, Kendallville, Indiana 46755

County: Noble SIC Code: 3089

Operation Permit No.: MSOP 113-16454-00059
Permit Reviewer: Edward A. Longenberger

The Office of Air Quality (OAQ) has reviewed an application from LDM Technologies, Inc. relating to the construction and operation of a plastic automotive parts manufacturing source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) manual paint spray booth, identified as MB-1, installed in 1985, equipped with a dry particulate filter, exhausting to Stack 1, capacity: 200 automotive air registers per hour.
- (b) One (1) automatic paint spray booth, identified as AB-1, installed in 1985, equipped with a dry particulate filter, exhausting to Stack 2, capacity: 1,000 automotive air registers per hour.
- (c) Forty (40) injection molding machines.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

(d) One (1) automatic paint spray booth, identified as AB-2, installed in 2003, equipped with a dry particulate filter, exhausting to Stacks AB-2-1 and AB-2-2, capacity: 360 automotive air registers per hour.

Existing Approvals

The source has been operating under the following previous approvals including:

- (a) Registration issued on July 18, 1985; and
- (b) Transfer of Ownership 113-8799-00059, issued on August 18, 1997.

All terms and conditions from previous approvals issued pursuant to the permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous approvals are superseded by this permit.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
Stack 1	Spray Booth (MB-1)	35	1.667	3,100	ambient
Stack 2	Spray Booth (AB-1)	35	2.0	4,400	ambient
AB-2-1	Spray Booth (AB-2)	38	1.667	2,100	ambient
AB-2-2	Electric Oven	38	0.833	1,000	170

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 12, 2002, with additional information received on December 16, 2002.

Emission Calculations

See pages 1 through 2 of 2 of Appendix A of this document for detailed emissions calculations.

Negligible VOC and HAPs emissions were calculated for the injection molding machines.

Potential To Emit From Entire Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)						
PM	6.20						
PM ₁₀	6.20						
SO ₂	0.00						
VOC	38.6						
СО	0.00						
NO_{χ}	0.00						

HAPs	Potential To Emit (tons/year)
Xylene	0.317
Toluene	4.23
MEK	6.32
HDI	0.007
Glycol Ether	4.23
Triethylamine	0.357
Ethylene Glycol	0.055
TOTAL	15.5

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is equal to or greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

Actual Emissions

No previous emission data has been received from the source.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

		Limited Potential to Emit (tons/year)										
Process/facility	PM	PM ₁₀	SO ₂	VOC	СО	NO _x	HAPs					
Spray Booth (MB-1)	1.39	1.39	-	16.9	-	-	5.52					
Spray Booth (AB-1)	3.68	3.68	-	6.07	-	-	4.64					

		Limited Potential to Emit (tons/year)										
Process/facility	PM	PM ₁₀	SO ₂	VOC	СО	NO _x	HAPs					
Spray Booth (AB-2)	1.13	1.13	-	15.6	-	-	5.35					
Injection Molding Machines	-	-	-	neg.	-	-	neg.					
Total Emissions	6.20	6.20	-	38.6	-	-	15.5					

County Attainment Status

The source is located in Noble County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
СО	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Noble County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Noble County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2,
 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance
 Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and
 volatile organic compound (VOC) emissions are not counted toward determination of PSD
 and Emission Offset applicability.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	5.07
PM ₁₀	5.07
SO ₂	0.00
VOC	23.0
CO	0.00
NO_X	0.00

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the operating permit application submitted by the company.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM ₁₀ (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	1.13	1.13	-	15.6	-	-
PSD Threshold Level	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit MSOP 113-16454-00059, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than one hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) any combination of HAPs is less than twenty-five (25) tons per year.

This status is based on all the air approvals issued to the source and calculations made by this permit reviewer.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

326 IAC 2-4.1-1 (New Source Toxics Control)

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments. Therefore, the requirements of 326 IAC 2-4.1-1 are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is located in Noble County and the potential to emit of CO, VOC, NO_X , PM_{10} and SO_2 are each less than one hundred (100) tons per year, therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Particulate from the one (1) manual paint spray booth (MB-1), the one (1) automatic paint spray booth (AB-1) and the proposed automatic paint spray booth (AB-2) shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

326 IAC 8-1-6 (New facilities; general reduction requirements)

The spray booths at this source are used to coat plastic automotive air registers, which is a process not specifically regulated under any provision of 326 IAC 8. The one (1) manual paint spray booth (MB-1), the one (1) automatic paint spray booth (AB-1) and the proposed automatic paint spray booth (AB-2) are not subject to the requirements of 326 IAC 8-1-6, because the potential VOC emissions from each booth are less than twenty-five (25) tons per year.

Conclusion

The construction and operation of this plastic automotive parts manufacturing source shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit **113-16454-00059**.

Appendix A: Emissions Calculations VOC and Particulate From Surface Coating Operations

Company Name: LDM Technologies, Inc.

Address City IN Zip: 300 South Progress Drive East, Kendallville, Indiana 46755

MSOP: 113-16454 PIt ID: 113-00059

Reviewer: Edward A. Longenberger Date: November 12, 2002

Material	Density (lbs/gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)		Transfer Efficiency
MB-1																
Redspot Medium Urethane Paint	8.47	56.38%	0.0%	56.4%	0.0%	34.46%	0.00160	200.000	4.77	4.77	1.53	36.67	6.69	1.29	13.86	75%
Redspot Thinner	6.91	100.00%	0.0%	100.0%	0.0%	0.00%	0.00160	200.000	6.91	6.91	2.21	53.07	9.69	0.00	N/A	75%
Redspot Catalyst	8.10	59.26%	0.0%	59.3%	0.0%	35.00%	0.000130	200.000	4.80	4.80	0.12	3.00	0.55	0.09	13.72	75%
AB-1																
United Paint Med. Dk. Graphite	8.95	62.45%	47.0%	15.5%	50.1%	32.21%	0.00100	1000.000	2.78	1.39	1.39	33.25	6.07	3.68	N/A	75%
AB-2																
Redspot Satin Aluminum Paint	8.30	60.04%	0.0%	60.0%	0.0%	31.71%	0.00081	360.000	4.98	4.98	1.45	34.88	6.36	1.06	15.71	75%
Redspot Urethane Hardener	8.10	59.26%	0.0%	59.3%	0.0%	35.00%	0.000057	360.000	4.80	4.80	0.10	2.36	0.43	0.07	13.72	75%
Thinner	6.91	100.00%	0.0%	100.0%	0.0%	0.00%	0.00081	360.000	6.91	6.91	2.01	48.36	8.83	0.00	N/A	75%

PM Control Efficiency 94.00%

Potential to Emit Add worst case coating to all solvents Uncontrolled 8.82 211.59 38.61 6.20

Controlled 8.82 211.59 38.61 0.37

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) * (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

Page 2 of 2 TSD AppA

Overall Total

15.5

Appendix A: Emission Calculations HAP Emission Calculations

Company Name: LDM Technologies, Inc.

Address City IN Zip: 300 South Progress Drive East, Kendallville, Indiana 46755

MSOP: 113-16454 Plt ID: 113-00059

Reviewer: Edward A. Longenberger Date: November 12, 2002

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % MEK	Weight % HDI	Weight % Glycol Ether	Weight % Triethylamine	Weight % Ethylene Glycol	Xylene Emissions	Toluene Emissions	MEK Emissions	HDI Emissions	Glycol Ether Emissions	Triethylamine Emissions	Ethylene Glycol Emissions
											(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
MB-1																	
Redspot Medium Urethane Paint	8.47	0.00160	200.000	0.94%	17.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.112	2.11	0.00	0.00	0.00	0.00	0.00
Redspot Thinner	6.91	0.00160	200.000	0.00%	0.00%	33.33%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	3.23	0.00	0.00	0.00	0.00
Redspot Catalyst	8.10	0.000130	200.000	6.79%	0.00%	0.00%	0.40%	0.00%	0.00%	0.00%	0.063	0.00	0.00	0.004	0.00	0.00	0.00
AB-1																	
United Paint Med. Dk. Graphite	8.95	0.00100	1000.000	0.00%	0.00%	0.00%	0.00%	10.78%	0.91%	0.14%	0.00	0.00	0.00	0.00	4.23	0.357	0.055
AB-2																	
Redspot Satin Aluminum Paint	8.30	0.00081	360.000	1.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.106	2.12	0.00	0.00	0.00	0.00	0.00
Redspot Urethane Hardener	8.10	0.000057	360.000	5.00%	0.00%	0.00%	0.40%	0.00%	0.00%	0.00%	0.036	0.00	0.00	0.003	0.00	0.00	0.00
Thinner	6.91	0.00081	360.000	0.00%	0.00%	35.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	3.09	0.00	0.00	0.00	0.00
											0.317	4.23	6.32	0.007	4.23	0.357	0.055

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs